



MetroSelect™ Single Line Configuration Guide

LOCATIONS

Corporate Headquarters

Metrologic Instruments, Inc.
90 Coles Road
Blackwood, NJ 08012-4683

Customer Service: 1-800-ID-METRO
Tel: 856-228-8100
Fax: 856-228-6673
Email: info@metrologic.com
Website: www.metrologic.com

Germany

Metrologic Instruments GmbH
Dornierstrasse 2
82178 Puchheim b.
Munich, Germany

Tel: 49-89-89019-0
Fax: 49-89-89019-200
Email: info@europe.metrologic.com

Spain

Metrologic Eria Ibérica SL
Julián Camarillo, 29 D-1
Bajo 28037 Madrid

Tel: 9 13 27 24 00
Fax: 9 13 27 38 29
Email: info@es.metrologic.com

Italy

Metrologic Italia S.r.l.
Via Emilia 68
1-40064 Ozzano dell'Emilia (BO)

Tel: 39-051-6511978
Fax: 39-051-6521337
Email: info@it.metrologic.com

United Kingdom

Metrologic Instruments UK Limited
Unit 58
Tempus Business Centre
Kingsclere Road
Basingstoke
Hampshire

Asia

Metrologic Asia (Pte) Ltd
31 Kaki Bukit Road 3
#05-08 Techlink
Singapore 417818

Tel: 65-842-7155
Fax: 65-842-7166
Email: info@sg.metrologic.com

China

Metro (Suzhou) Technologies Co., Ltd.
221 Xing Hai Street
Suzhou Industrial Park
Suzhou, China 215021

Tel: 86-512-2572511
Fax: 86-512-2571517
Email: info@cn.metrologic.com

South America

Metrologic South America
Rua Flórida, 1821 - 5º Andar
São Paulo, SP, Brasil
CEP: 04571-090

Tel: 5511-5505-6568
Fax: 5511-5505-1681
Email: info@sa.metrologic.com

Brazil

Metrologic do Brasil Ltda.
Rua Flórida, 1821 - 5º Andar
São Paulo, SP, Brasil
CEP: 04571-090

Tel: 5511-5505-2396
Fax: 5511-5507-2301
Email: info@br.metrologic.com

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INTRODUCTION

Your new scanner has been configured at the factory with default settings.

Many host systems have unique formats and protocol requirements. Therefore, Metrologic provides a wide range of configurable features that may be selected using this bar code based configuration tool. Once the configuration is completed, the scanner stores the settings in nonvolatile memory (NOVRAM). NOVRAM saves the settings when the power is turned off.

NOTE: Every bar code with on “*” (asterisk) is a default setting. Bar codes with “~” (tilde) require multi-code configuration method.

DIRECTIONS

The MetroSelect class of scanners can be bar code configured in two ways: Single Code Method and Multi-Code Method.

Single Code Method: Most features can be enabled or disabled using the Single Code Method. Scan the bar code next to the feature. A multi-tone beep will follow to indicate the configuration has been saved to NOVRAM.

The MS6200 scanner requires MultiCode programming as described below.

Multi-Code Method: All features can be enabled or disabled using the Multi-Code Method. A feature with a “~” requires the Multi-Code Method, scan the “Enter/Exit Configuration Mode” code. Next, scan the codes for the needed feature. Then scan the Enter/Exit Configuration Code to exit and save the configuration changes. To abort a configuration change, power off the scanner before scanning the Enter/Exit code.

BAR CODE CONFIGURATION METHODS

Single Code Method:

1. Power up scanner
2. Scan the bar code for the desired feature
3. Observe a multi-toned, “save setting” beep.

Multi-Code Method:

1. Power up scanner
2. Scan Enter/Exit Configuration Mode bar code (3 beeps)
3. Scan bar code for the desired feature (1 beep)
4. Scan Enter/Exit Configuration Mode bar code (3 beeps) and save new configuration

Enter/Exit
Configuration Mode



NEED TO START OVER?

Use the Recall Default bar code. This will erase all previous settings and return to the scanner's default communications protocol.

Keyboard Wedge interface scanners will load keyboard wedge defaults.

All other scanners load RS-232 defaults.

Note: Metrologic manufactures custom OEM scanners which load the OEM's defaults. Page 92 will explain how this affects "Metrologic Defaults."

Recall Defaults



CODE TYPES AND DECODE RULES

Code Descriptions with an asterisk define a feature which is set as a function of standard factory defaults.

UPC/EAN



***Enable UPC/EAN.**



Disable UPC/EAN.



***Enable UPC-A.**



Disable UPC-A.



***Enable UPC-E.**



Disable UPC-E.



***Enable EAN-13.**



Disable EAN-13.

CODE TYPES AND DECODE RULES (CONTINUED)

UPC/EAN



Enable EAN-8.



Disable EAN-8.

Code 128



***Enable Code 128.**



Disable Code 128.



Enable UCC/EAN-128. 'JC1' Code Formatting.
For Coupon Code 128, see page 19.



***Disable UCC/EAN – 128.
'JC1' Code formatting.**

CODE TYPES AND DECODE RULES (CONTINUED)

Code 39



***Enable Code 39.**



Disable Code 39.



Enable MOD 43 Check on Code 39.

When enabled, the scanner will only scan Code 39 bar codes that have a valid Modulo 43 check digit.



***Disable MOD 43 Check on Code 39.**

The scanner will not test Code 39 bar codes for a Modulo 43 check digit.



Enable Full ASCII Code 39.



***Disable Full ASCII Code 39.**



Enable PARAF (Italian Pharmaceutical Codes) Support. When enabled, the scanner will convert Code 39 bar codes to PARAF format.



***Disable PARAF Support.** When disabled, the scanner will not convert Code 39 bar codes to PARAF format.

CODE TYPES AND DECODE RULES (CONTINUED)

Code 39



Enable TRI-OPTIC Code.



***Disable TRI-OPTIC Code.**

INTERLEAVED 2 OF 5 CODES



***Enable Interleaved 2 of 5 (ITF).**



Disable Interleaved 2 of 5 (ITF).



Enable MOD 10 check on ITF.

When option enabled, the scanner will only scan Interleaved 2 of 5 (ITF) bar codes that have a Modulo 10 check digit.



***Disable MOD 10 Check on ITF.** When option disabled, the scanner will not test Interleaved 2 of 5 (ITF) bar codes for a Modulo 10 check digit.



~ITF Symbol Length Lock 1. To specify a First ITF symbol length lock, scan this bar code and the appropriate code bytes located on pages 83-90. Refer to Multi Code Method on page 1.

Interleaved 2 of 5



~ITF Symbol Length Lock 2. To specify a second ITF symbol length lock, scan this bar code and the appropriate code bytes located on pages 83-90. Refer to Multi Code Method on page 1.



~ITF Minimum Symbol Length. To specify a minimum number of ITF characters to be decoded, scan the bytes located on pages 83-90. Refer to Multi Code Method on page 1.



***Disable Standard 2 of 5.**



Enable Standard 2 of 5



~Standard 2 of 5 Symbol Length. To specify a minimum number of characters to be decoded, scan this bar code and the appropriate code bytes located on pages 83-90. Refer to Multi Code Method on page 1.

CODE TYPES AND DECODE RULES (CONTINUED)

Other 2 of 5 Codes



Enable Matrix 2 of 5.



***Disable Matrix 2 of 5.**



Enable 15 digit Airline 2 of 5.



***Disable 15 Digit Airline 2 of 5.**



Enable 13 Digit Airline 2 of 5.



***Disable 13 Digit Airline 2 of 5.**



Enable Hong Kong 2 of 5.



***Disable Hong Kong 2 of 5.**

CODE TYPES AND DECODE RULES (CONTINUED)

Codabar



***Enable Codabar.**



Disable Codabar.



Enable Dual Field Codabar.



***Disable Dual Field Codabar.**

Code 93



***Enable Code 93.**



Disable Code 93.

CODE TYPES AND DECODE RULES (CONTINUED)

Code 11



Enable Code 11.



***Disable Code 11.**

Telepen



Enable Telepen.



***Disable Telepen.**



Enable ALPHA Telepen.



***Disable ALPHA Telepen.**

CODE TYPES AND DECODE RULES (CONTINUED)

Plessey Codes



Enable MSI Plessey.



***Disable MSI Plessey.**



***No MSI Plessey Check Digit.**

This option will not test MSI Plessey bar codes for a check digit.



Enable MSI Plessey MOD 10/10 Check Digit. Test MSI Plessey bar codes for a 2 digit Modulo 10 check digit.



***Enable MSI Plessey Mod 10 Check Digit.** Test MSI Plessey bar codes for a 1 digit Modulo 10 check digit.



Enable UK Plessey.



***Disable UK Plessey.**



UK Plessey A to X Conversion Enabled. Enables UK Plessey A to X Conversion.



***UK Plessey A to X Conversion Disabled.** Disables UK Plessey A to X Conversion.

CODE TYPES AND DECODE RULES (CONTINUED)

Other Decode Features



Enable Double Border Required/Large Intercharacter Space.



***Disable Double Border Required/Large Intercharacter Space.**



Enable
Small Border Required



Disable
Small Border



~Minimum Symbol Length. Omnidirectional default is 4. Single-line default is 3. Combine this code with the proper Code Bytes, to specify the minimum number of characters in all non-UPC/EAN bar codes. Refer to Multi-Code Method on page 1.



~Symbol Length Lock.
This code combined with the proper Code Bytes, locks the bar code's length into place. Refer to Multi-Code Method on page 1.

CODE TYPES AND DECODE RULES (CONTINUED)

Configurable Code Lengths

There are seven bar code lock lengths available. Specific code types can be assigned to a lock length. While in programming mode, start with lock length 1, then scan three Code Byte bar codes (pages 83-90) that represent the bar code length. (A table with the code type values can be found on pages 83-90. Refer to Multi-Code Method on page 1.

This process can be repeated for lock lengths 2 through 7.



~Code Lock #1: Length.



~Code Lock #1: Code Type.



~Code Lock #2: Length.



~Code Lock #2: Code Type.



~Code Lock #3: Length.



~Code Lock #3: Code Type.

Configurable Code Lengths



~Code Lock #4: Length.



~Code Lock #4: Code Type.



~Code Lock #5: Length.



~Code Lock #5: Code Type.



~Code Lock #6: Length.



~Code Lock #6: Code Type.



~Code Lock #7: Length.



~Code Lock #7: Code Type.

SUPPLEMENTS



Enable Two Digit Supplements.



***Disable Two Digit Supplements.**



***Enable Two Digit Redundancy.**

Twice before accepting data, the scanner will scan the bar code plus the 2 digit add on.



Disable Two Digit Redundancy.

Does not implement the two digit redundancy feature.



Enable Five Digit Supplements.



***Disable Five Digit Supplements.**



Enable Five Digit Redundancy.

Twice before accepting data, the scanner will scan the bar code plus the five digit add on.



***Disable Five Digit Redundancy.**

Does not implement the five digit redundancy feature.

SUPPLEMENTS (CONTINUED)



Supplements are Required.

All UPC/EAN labels that are scanned must have a supplement.



***Supplements are not Required.**

All UPC/EAN labels do not require a supplement to be scanned.



Enable Remote Supplemental Requirement.

Not supported – MS9500 & MS6200.



***Disable Remote Supplemental Requirement.**

Not supported – MS9500 & MS6200.



Enable Bookland (978) Supplement Requirement.



***Disable Bookland (978) Supplement Requirement.**



Enable 977 (2 digit) Supplemental Requirement.

The scanner will require a 2 digit supplement be scanned whenever an EAN-13 code begins with 977.



***Disable 977 (2 digit) Supplemental Requirement.**

the scanner will not require a 2 digit supplement be scanned whenever an EAN-13 code begins with 977.

SUPPLEMENTS (CONTINUED)



³ 1 0 1 3 1 3

Enable 378/379 French Supplement Requirement.



³ 1 0 1 3 0 3

***Disable 378/379 French Supplemental Requirement.**



³ 1 0 1 4 1 5

Enable 434/439 German Supplemental Requirement.



³ 1 0 1 4 0 5

***Disable 434/439 German Supplemental Requirement.**



³ 1 0 1 4 1 2

Enable #System 2 Requires Supplements.



³ 1 0 1 4 0 2

***Disable #System 2 Requires Supplements.**



³ 1 0 1 2 1 5

Enable #System 5 Requires Supplements.



³ 1 0 1 2 0 5

***Disable #System 5 Requires Supplements.**

SUPPLEMENTS (CONTINUED)



Enable Coupon Code 128.



***Disable Coupon Code 128.**



Enable Code 128 'JC1' Extended Code Format.

Scanner transmits an 'JC1' at the beginning of the Code 128 portion of the coupon code.



***Disable Code 128 'JC1' Extended Code Format.**

When disabled scanner will not transmit on 'JC1' at the beginning of the Code 128 portion of the coupon code.



Enable 128 Group Separators.

"GS" (1DH) character will be transmitted with coupon Code 128 codes.



***Disable 128 Group Separators.**

"GS" (1DH) character will not be transmitted with coupon Code 128 codes.



400 msec to Find Supplemental.

With this option, the scanner will allot 400 milliseconds to "find" an add on after a main UPC/EAN bar code has been scanned.

SUPPLEMENTS (CONTINUED)



200 msec to Find Supplemental.

With this option the scanner will allot 200 milliseconds to “find” an add on after a main UPC/EAN bar code has been scanned.



***100 msec to Find Supplemental.**

With this option, the scanner will allot 100 milliseconds to “find” an add on after a main UPC/EAN bar code has been scanned.



Enable Code ID's with Supplements.



***Disable Code ID's with Supplements**



***Beep Once on Supplements.**



Beep Twice on Supplements.



Enable ISBN Check Digit Transmission.

Not available with all models.

SUPPLEMENTS (CONTINUED)



Disable ISBN Check Digit Transmission.



Enable Bookland to ISBN Conversion.
Not available with all models



***Disable Bookland to ISBN Conversion.**



Enable ISBN Re-Formatting.



***Disable ISBN Re-Formatting.**

Activation Range

Use these bar codes to select infrared (IR) sensor activation range for sensing when objects are placed in the scan field.



***Long Range in Stand.**



Short Range in Stand.



***Long Range out of Stand.**



Short Range out of Stand.

CodeGate™ Status

Use the following to control button functions.



CodeGate Active in the Stand.



***CodeGate Inactive in the Stand.**



***CodeGate Active Out of Stand.**



CodeGate Inactive Out of Stand

MS 9500 VOYAGER (CONTINUED)

Laser/Scan Modes



***Normal Scan.**

Laser turns on after the IR senses a bar code.
The laser remains on for approximately 3 to 10 seconds.



Blinky Scan.

Laser turns on after the IR senses a bar code.
The laser will blink on/off for approximately 60 seconds.



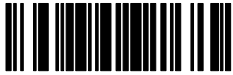
Continuous Blinky Scan. The laser blinks continuously. The IR is inactive.



Custom (One Shot) Scan.

Laser turns on after a good decode.

Same Symbol Time Outs



³ 8 1 8 9 0 0

No Same Symbol Time Out.



³ 3 1 8 9 1 0

1000 msec Same Symbol Time Out.



³ 3 1 8 9 2 0

***875 msec Same Symbol Time Out.**



³ 3 1 8 9 3 0

750 msec Same Symbol Time Out.



³ 3 1 8 9 4 0

625 msec Same Symbol Time Out.



³ 3 1 8 9 5 0

500 msec Same Symbol Time Out.



³ 3 1 8 9 6 0

375 msec Same Symbol Time Out.

Same Symbol Timeout



250 msec Same Symbol Time Out.



Infinite Same Symbol Time Out.

COMMUNICATIONS



Enable Light Pen/Wand Communication.
Use this option if scanner should be used in place of a light pen.



***Enable RS-232.**
When this option is enabled, the scanner will work with RS-232 +/- 12V serial output.



Load Keyboard Wedge Defaults.
Scan this code before selecting Normal or Stand Alone Wedge Mode. Goes into normal keyboard wedge defaults.



Enable Stand-Alone Keyboard Scanner.
Allows scanner to be used without an external keyboard.



Enable Keyboard Wedge Emulation.
Select if the scanner provides keyboard emulation by converting the scanned bar code data to the PC keyboard scan code equivalent.



Load OCIA Defaults.
Scan this code before selecting Enable OCIA output.



Enable OCIA Output.
Select this option if the communications requirement is on Optically Coupled Interface Adapter (OCIA). This is a docked (by the host) serial interface.

COMMUNICATIONS (CONTINUED)



Load IBM 46xx Defaults.



Enable IBM 46xx Communication.

Select this option for IBM 46xx SIOC/RS485 communications. Not all scanners support this interface. The correct interface board is required.



Enable No Communication Mode.

Select this option if the scanner does not interface with the host device.



Reserved.



Reserved.

SCANNER OPERATION

Configuration Mode Options



Allow Configuration Mode on Power-up.
Scanner can only enter MetroSet™ mode before any bar codes are scanned.



***Allow Configuration Mode Anytime.**
Allow MetroSet configuration at any time.



Allow configuration labels on Power-up.
Once a product bar code is scanned after power-up, the scanner will not accept configuration bar codes.



***Allow Configuration Labels Anytime.**
Allows scanning of configuration bar codes at any time.

Scan Buffers



***1 Scan Buffer.**

When enabled, the scanner will scan one bar code in the scan field and not scan again until the bar code is removed from the scan field for the duration of the same symbol time out.



2 Scan Buffers.

When enabled, the scanner will scan 2 bar codes in the scan field one time each. These 2 bar codes will not be scanned again and until they are removed from the scan field for the duration of the same symbol time out



3 Scan Buffers.

Same function as 2 Scan Buffers, but 3 bar codes are in the scan field



4 Scan Buffers.

Same function as 2 Scan Buffers, but 4 bar codes are in the scan field.

Redundant Scans



***0 Redundant Scans.**

Requires 1 good decode for a “good scan”.



1 Redundant Scan.

Requires 2 consecutive decodes of the same bar code data for a “good scan”.



2 Redundant Scans.

Requires 3 consecutive decodes of the same bar code data for a “good scan”.



3 Redundant Scans.

Requires 4 consecutive decodes of the same bar code data for a “good scan”.



4 Redundant Scans.

Requires 5 consecutive decodes of the same bar code for a “good scan”.



5 Redundant Scans.

Requires 6 consecutive decodes of the same bar code for a “good scan”.



6 Redundant Scans.

Requires 7 consecutive decodes of the same bar code for a “good scan”.



7 Redundant Scans.

Requires 8 consecutive decodes of the same bar code for a “good scan”.

Miscellaneous Decode Features



Optional Same Symbol Check.

Requires 1 different character between successive bar codes to consider the bar code "new".



***Normal Same Symbol Check.**

Requires 3 different characters between successive bar codes to consider the bar code "new".

Same Symbol Timeouts

The numbers determine the length of time before a bar code can be rescanned after it is removed from the scan field. Single code fixed settings in msec of No, 50, 100, 200, 500, 1200, (1.2 sec), 2000 (2.0 sec) and infinite are available. Also, user-configurable value can be set in user-configurable increments of 50 for a range of 50 msec to 6350 (6.35 sec).

If using the MS9500 series, please go to Page 24.



No Same Symbol Time Out..



Infinite Same Symbol Time Out.

When selected, the scanner will not repetitively scan the same bar code. This option overrides the symbol rescan time-outs.

SCANNER OPERATION (CONTINUED)

LED Options



Flash Green LED if Rescan Allowed.
This indicates same symbol timeout has elapsed.



***Do Not Flash Green LED if Rescan Allowed.**



Reverse LED Functions.
Red = Laser On
Green = Good Read



***Normal LED Functions.**
Green = Laser On
Red = Good Read

SCANNER OPERATION (CONTINUED)

Beeper Options



***Normal Tone.**



Optional Tone 1.



Optional Tone 2.



Optional Tone 3.



Optional tone 4.



Optional Tone 5.



Optional tone 6.



No Beep.

Beeper Options



***Beep Once on Supplements.**



Beep Twice on Supplements.



Enable Fast Beep



***Disable Fast Beep.**



Beep on BEL Command.

The scanner beeps when it receives a BEL character from the host. If a number is sent within 200msecs before the BEL character, the scanner will beep that number of times



***Ignore BEL Command.**



Enable Light Pen Toggle During Beep.

When enabled, the scanner beeps and toggles the light pen data line on a successful decode. This drives a good read indicator.



***Disable Light Pen Toggle During Beep.**

Data Transmission Delays

Use these codes to select the amount of delay between sending data characters from the scanner to the host. This helps prevent the scanner from overflowing host input buffers.



***1 msec Intercharacter Delay.**



10 msec Intercharacter Delay.



25 msec Intercharacter Delay.



~Variable msec Intercharacter Delay.

Scan this bar code and a sequence of code bytes (pages 83-90) to set the delay between characters sent to the host system. (Range from 1 to 255 msec.) Refer to the Multicode Method on page 1.



No Intercharacter Delay.

SCANNER OPERATION (CONTINUED)

Communication Timeout Options



³ 1 1 8 4 1 2

Enable Communications Timeouts.



³ 1 1 8 4 0 2

***Disable Communications.**



³ 1 1 8 4 1 3

***Beep Before Transmit.**

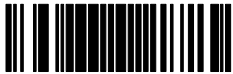
Scanner will beep after each label is transmitted.



³ 1 1 8 4 0 3

Beep After Transmit.

Scanner will beep after each label is transmitted.



³ 9 1 9 1 0 0

~Variable Communications Time Out



³ 8 1 9 1 4 0 0

***Default Communications Time Out (2 secs).**



³ 8 1 9 1 2 0 0

Short communications Time Out (1 secs).

SCANNER OPERATION (CONTINUED)

Communication Timeout Options



³ 8 1 9 1 8 0 0

Long communications Time Out (4 secs).



³ 1 1 8 4 1 0

Three Beeps on Time Out.



³ 1 1 8 4 0 0

***No Beeps on Time Out.**



³ 1 1 8 4 1 1

Razzberry Tone on Time Out.



³ 1 1 8 4 0 1

***No Razzberry Tone on Time Out.**

SCANNER OPERATION (CONTINUED)

Host Scanner Commands



Enable “D/E” Disable Command.

When this option is chosen, the scanner will disable scanning after it receives an ASCII “D” from the host device. It will enable scanning when it receives an ASCII “E”.



“Disable “D/E” Disable.

Do not monitor D/E commands.



Enable Z/R type D/E Simulation.

When this option is chosen, the scanner will disable scanning after it receives an ASCII “Z” from the host device. It will enable scanning when it receives an ASCII “R”.



“No “Z/R” Type “D/E” Simulation.

Do not monitor Z/R commands.



Enable “F/L” Laser Command.

When enabled, the scanner will turn off the laser after the scanner receives on ASCII “F” character. The laser will turn on after it receives an ASCII “L” character.



***Disable “F/L” Laser Command.**

Do not monitor “F/L” commands.



Use DTR Scan Disable

When enabled, the scanner will monitor the DTR input to determine if scanning should be allowed. A +12V “active” level enables decoding. A –12V “inactive” level disables decoding.

SCANNER OPERATION (CONTINUED)

Host Scanner Commands



³ 1 1 8 1 0 5

***Do not use DTR Scan Disable.**

Do not monitor the DTR input.



³ 1 1 8 1 1 0

Activate DC2 Character.

When enabled, scanning will be initiated with the receipt of a DC2 character (^R, 124).



³ 1 1 8 1 0 0

***Do Not Activate on DC2 Character.**



³ 1 1 8 1 1 1

Transmit "NO READ" if DC2 Activated.



³ 1 1 8 1 0 1

Do Not Transmit "NO READ" if DC2 Activated.



³ 1 1 8 3 1 1

No Green LED During "NO READ" Xmit..



³ 1 1 8 3 0 1

***Green LED During "NO READ" Xmit.**

Test Modes



Scanability ON.

This option enters scanability test mode. ***Do not enable unless instructed by a Metrologic representative.***



***Scanability OFF.**



Scan Count Mode ON.

When enabled the scanner will enter scan count test mode and the scanner's firmware number will transmit to the host. ***Do not enable unless instructed by a Metrologic representative.***



***Scan Count Mode OFF.**

Note: Scan "Enter configuration mode" code before trying to set this feature.
Please refer to MultiCode Method on page 1.

User configurable Prefixes, All Data



~Configurable Prefix Character #1.
When this option is chosen, a prefix ID can be added and assigned for data transmission. Use this code with a 3 code byte sequence (pages 83-90 that represents the desired character.



~Configurable Prefix Character #2.
Assigns a second configurable prefix character.



~Configurable Prefix Character #3.
Assigns a third configurable prefix character.



~Configurable Prefix Character #4.
Assigns a fourth configurable prefix character.



~Configurable Prefix Character #5.
Assigns a fifth configurable prefix character.



~Configurable Prefix Character #6.
Assigns a sixth configurable prefix character.



~Configurable Prefix Character #7.
Assigns a seventh configurable prefix character.

PREFIXES/SUFFIXES

User Configurable Prefixes, All Data



~Configurable Prefix #8.
Assigns an eighth configurable prefix character.



~Configurable Prefix Character #9.
Assigns a ninth configurable prefix character.



~Configurable Prefix Character #10.
Assigns a tenth configurable prefix character.



***Clear All User Configurable Prefixes.**

User Configurable ID Characters, Code Specific



***Use Configurable Code ID Bytes as Prefixes.**

User configured, code specific ID bytes are transmitted before the data. If using prefixes, user configured suffixes can not be used.



Use Configurable Code ID Bytes as Suffixes.

User configured, code specific ID bytes are transmitted after the data. If using suffixes, user configured prefixes can not be used.



Configurable UPC-A ID.

While using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



Configurable UPC-E ID.

While using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represents a unique ID character to be associated with this bar code type. Please refer to the MultiCode Method on page 1.



Configurable EAN-8 ID.

While in using the MultiCode Method, scan this bar code followed by 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page1.



Configurable EAN-13 ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

User Configurable ID Characters, Code Specific



Configurable Code 39 ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



Configurable Code 128 ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



Configurable Code 93 ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



Configurable Code 11 ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



Configurable Telepen ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

User configurable ID Characters, Code Specific

**Configurable TRI-OPTIC ID.**

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

**Configurable Standard 2 of 5 ID.**

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

**Configurable Interleaved 2 of 5 ID.**

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

**Configurable Matrix 2 of 5 ID.**

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

**Configurable Airline 2 of 5 ID.**

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

**Configurable MSI Plessey ID.**

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.

User Configurable ID Characters, Code Specific



Configurable UK Plessey ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



Configurable Codabar ID.

While in using the MultiCode Method, scan this bar code followed by the 3 code byte bar codes (pages 83-90) that represent a unique ID character to be associated with this bar code type. Please refer to MultiCode Method on page 1.



***Clear All Configurable Code Specific ID's.**

Clears all unique ID characters previously identified.

PREFIXES/SUFFIXES (CONTINUED)

Standard Prefix Characters



Enable STX Prefix.

When enabled, the scanner will transmit a Start of TeXt (ASCII 02H) before each bar code.



***Disable STX Prefix.**

Will not transmit a Start of TeXt (ASCII 02H) before each bar code.



Enable Rochford-Thomson Mode.



***Disable Rochford-Thomson Mode.**



Enable AIM ID Characters.



***Disable AIM ID Characters.**



Enable UPC Prefix ID.

When enabled, the scanner will transmit a prefix before any UPC/EAN bar code. The prefixes are A (UPC-A), E0 (UPC-E), F (EAN-13, and FF (EAN-8).



***Disable UPC Prefix ID.**

Do not send prefix ID Characters with UPC/EAN codes.

Standard Prefix Characters

**Enable NCR Prefix ID.**

When enabled, the scanner will transmit a prefix before the following code types. The prefixes are as follows: A (UPC-A), E0 (UPC-E), FF (EAN-8), F (EAN 13), B1 (Code 39, B2 (ITF), B3 (Code 128 and other codes).

***Disable NCR Prefix ID.****Enable Nixdorf ID Characters.**

When enabled, this option transmits code identities before each bar code for many Siemens/Nixdorf registers.

***Disable Nixdorf ID Characters.**

This bar code will not transmit Siemens/Nixdorf code identities.

**Enable SANYO ID Characters.**

Transmit Sanyo ID Characters.

***Disable SANYO ID Characters.**

Do not transmit Sanyo ID Characters.

**Enable Manufacturer ID Prefix.**

Transmits "METROLOGIC" before all bar code data to identify the scanner as Metrologic scanner.

PREFIXES/SUFFIXES (CONTINUED)

Standard Prefix Characters



***Disable Manufacturer ID Prefix.**
Will not transmit the identification string.



Enable "C" Prefix



***Disable "C" Prefix.**



Enable "\$" Prefix ID for UPC/EAN.



***Disable "\$" Prefix ID for UPC/EAN.**



Enable Tab Prefix.
The Scanner will transmit a TAB (ASCII 09H)
before each bar code.



***Disable Tab Prefix.**
Will not transmit a TAB.

PREFIXES/SUFFIXES (CONTINUED)

Standard Prefix Characters



Enable SNI Beetle Mode.



***Disable SNI Beetle Mode.**



Enable Cipher 1021 IDs.



***Disable Cipher 1021 Ids.**

Standard Suffix Characters



***Enable CR Suffix.**

When enabled, the scanner transmits a Carriage Return after each bar code.



Disable CR Suffix.

The scanner will not transmit a Carriage Return after each bar code.



***Enable LF Suffix.**

When enabled, the scanner transmits a Line Feed after each bar code.

NOTE: Disabled when keyboard wedge defaults are loaded.



Disable LF Suffix.

The scanner will not transmit a Line Feed after each bar code.



Enable Tab Suffix.

When enabled, the scanner will transmit a TAB (ASCII 09H) after each bar code.



***Disable Tab Suffix.**

Will not transmit TAB (ASCII 09H) after each bar code.



Enable ETX Suffix.

When enabled, the scanner will transmit End of TeXt (ASCII 03H) after the bar code date.

PREFIXES/SUFFIXES (CONTINUED)

Standard Suffix Characters



***Disable ETX Suffix.**

When disabled, the scanner will not transmit End of TeXt (ASCII 03H).



Enable UPC Suffix ID.

When enabled, the scanner will transmit a suffix after any UPC/EAN bar code. The suffixes are A (UPC-A), E (UPC-E), F (EAN-13) and F (EAN-8).



***Disable UPC Suffix ID.**

Will not transmit a suffix after UPC/EAN bar codes.

Longitudinal Redundancy Check

A Longitudinal Redundancy Check (LRC) is an error checking character that is calculated across a sequence of data characters. It is determined by eXclusive ORing (XOR) the characters to be checked, starting with an initial value of 00H.

The result, an "LRC byte" is then transmitted following the data stream and used by the receiving computer to determine if the information was received correctly. In the scanner's case, XOR is performed prior to adding parity bits.

When the LRC is enabled, the scanner defaults to starting the LRC on the second byte of information transmitted. Optionally, the calculation can start on the first byte transmitted.



Enable Transmit of LRC Calculation.

With this option, the scanner outputs an LRC check character after the bar code.



***Disable Transmit of LRC Calculation.**

Will not output an LRC (check character) after the bar code.



Start LRC on Second Byte.

The scanner will calculate the LRC check digit starting with the second character.



***Start LRC on First Byte.**

The scanner will calculate the LRC check digit starting with the first character.

User Configurable Suffixes, All Data

NOTE: Scan "Enter configuration mode" code before trying to set this feature. Refer to MultiCode Method on page 1.



~Configurable Suffix Character #1.

When chosen, a suffix ID can be added and assigned for data transmission. Use this code with a 3 code byte sequence (pages 85-93) that represents the desired character.



~Configurable Suffix Character #2.

Assigns a second configurable suffix character.



~Configurable Suffix Character #3.

Assigns a third configurable suffix character.



~Configurable Suffix Character #4.

Assigns a fourth configurable suffix character.



~Configurable Suffix Character #5.

Assigns a fifth configurable suffix character.



~Configurable Suffix Character #6.

Assigns a sixth configurable suffix character.

PREFIXES/SUFFIXES (CONTINUED)

User Configurable suffixes, All Data



~Configurable Suffix Character #7.
Assigns a seventh configurable suffix character.



~Configured Suffix Character #8
Assigns an eighth configurable suffix character.



~Configurable Suffix Character #9.
Assigns a ninth configurable suffix character.



~Configurable Suffix Character #10.
Assigns a tenth configurable suffix character.



***Clear All User Configurable Suffixes.**

Special Formats



Enable SINEKO Mode.



***Disable SINEKO Mode.**



Enable Newcode formatting Mode A.



***Disable Newcode Formatting Mode A.**



Enable Newcode Formatting Mode B.



***Disable Newcode Formatting Mode B.**

CODE FORMATTING

UPC/EAN Formatting



***Transmit UPC-A Check Digit.**



Do Not Transmit UPC-A Check Digit.



Transmit UPC-E Check Digit.



***Do Not Transmit UPC-E Check Digit.**



Expand UPC-E to 12 Digits.
Expand UPC-E bar codes to the 12 digit equivalent, UPC-A bar codes.



***Do Not Expand UPC-E to 12 Digits.**
Do not expand UPC-E to the 12 digit equivalent, UPC-A bar codes.



Convert UPC-A to EAN-13.
With this option, the scanner converts UPC-A to EAN-13 by transmitting a leading zero before the bar code.

UPC/EAN Formatting



***Do Not Convert UPC-A to EAN-13.**

With this option, the scanner will not convert UPC-A to EAN-13.



Transmit Lead Zero on UPC-E.

When chosen, this option will transmit a zero before each UPC-E bar code.



Do Not Transmit Lead Zero on UPC-E.

This option will not transmit a zero before each UPC-E bar code.



Convert EAN-8 to EAN-13.

When chosen, the scanner will transmit five zeros before the bar code to convert EAN-8 to EAN-13.



***Do Not Convert EAN-8 to EAN-13.**



***Transmit UPC-A Number System.**



Do Not Transmit UPC-A Number System.

CODE FORMATTING (CONTINUED)

UPC/EAN Formatting



***Transmit UPC-A MFR#.**



Do Not Transmit UPC-A MFR#.



***Transmit UPC-A ITEM#.**



Do Not Transmit UPC-a ITEM#.



***Transmit EAN-8 Check Digit.**



Do Not Transmit EAN-8 Check Digit.



***Transmit EAN-13 Check Digits.**
Scanner will transmit EAN-13 Check Digit.



Do Not Transmit EAN-13 Check Digit.
Scanner will not transmit EAN-13 Check Digit.

Codabar Formatting



Transmit Codabar Start/Stop Characters.
Transmits Codabar's Start/stop characters before and after each bar code.



***Do Not Transmit Codabar Start/Stop.**
Will not transmit Codabar's start/stop characters before and after each bar code.



Enable CLSI Editing.
Works only with 14 digit Codabar type lengths. This option will perform CLSI type editing before the information is transmitted to the host.



***Do Not Enable CLSI Editing.**
This option will not perform CLSI type editing before the information is transmitted to the host.

Code 39 Formatting



Transmit Mod 43 Check Digit on Code 39.
This feature works in conjunction with Mod 43 Check on code 39 option page 6. Both must be enabled for this feature to work.



***Do Not Transmit Mod 43 Check Digit On Code 39.**
This option will not transmit Code 39's Mod 43 check character.



Transmit Code 39 Stop/Start Characters.
When chosen, the scanner transmits Code 39's start and stop characters before and after each bar code.



***Do Not Transmit Code 39.**
When chosen, the scanner will not transmit Code 39's start and stop characters before and after each bar code.

CODE FORMATTING (CONTINUED)

Code 11 Formatting



Transmit Code 11 Check Digit.

This bar code will transmit Code 11 check characters when used with Enabled Code 11 page 11.



***Do Not Transmit Code 11 Check Digit.**

This bar code will not transmit Code 11 check characters.

Telepen



Enable convert Telepen ^L to E.



***Disable Convert Telepen ^L to E.**

Plessey

**Transmit UK Plessey Check Digit.**

The scanner will transmit UK Plessey Check Digit characters and must be used with the UK Plessey option.

***Do Not Transmit UK Plessey Check Digit.**

Will not transmit UK Plessey Check Digit characters.

**Enable UK Plessey Special Format.****Disable UK Plessey Special Format.****Transmit MSI Plessey Check Digit.**

This option works in conjunction with one or both of the Enabled MSI Plessey Mod options page 12.

***Do Not Transmit MSI Plessey Check Digit.**

The scanner will not transit MSI Plessey's check digit characters.

2 of 5 Code Formatting



Transmit Mod 10 Check Digit on ITF.

With this option, the scanner transmits interleaved 2 of 5 (ITF) Mod 10 check character.



***Do Not Transmit Mod 10 Check Digit on ITF.**

The scanner will not transmit interleaved 2 of 5 (ITF) Mod 10 check character. Works in conjunction with Mod 10 check on ITF. Both must be enabled for this feature to work.



Transmit Matrix 2 of 5 Check Digit.



***Do Not Transmit Matrix 2 of 5 Check Digit.**

RS-232



***Enable RS-232 Mode.**

When enabled the scanner will work with RS-232 +/-12V serial output.

Parity Features

A parity bit is an extra data bit used to help catch data transmission errors. The scanner's parity must match the host's parity.



No Parity.



Odd Parity.

Select Odd Parity to set the parity bit to either a 1 or a 0 to ensure an odd number of bits are 1's.



***Space Parity.**

Select Space Parity to set the parity bit always .



Even Parity.

Select Even Parity to set the parity bit to either a 1 or 0 to ensure an even number of bits are 1's.



Mark Parity.

Select Mark Parity to set the parity bit always 1.

RS-232 (CONTINUED)

BAUD Rate



38400 BAUD Rate.



19200 BAUD Rate.



14400 BAUD Rate.



***9600 BAUD Rate**



57600 BAUD Rate



4800 BAUD Rate.



2400 BAUD Rate.



1200 BAUD Rate.

BAUD Rate



600 BAUD Rate.



300 BAUD Rate.

Data/Stop Bits



8 Data Bits.

Number of data bits transmitted for each character.



***7Data Bits.**



1 Stop Bit.



***2 Stop Bits.**

Hardware Handshaking



Enable RTS/CTS Handshaking.

Output a Request to Send (RTS) signal and wait for a Clear to Send (CTS) signal before transmitting data.



*Disable RTS/CTS Handshaking.

Do not use RTS/CTS handshaking.



*Character RTS/CTS.

Activate/Deactivate RTS signal for each character.



Message RTS/CTS.

Activate RTS before sending the first character and leave it active until after the last character has been transmitted.



Invert RTS Polarity (RSV1)

+12V = Inactive

-12V = Active



*Standard RTS Polarity.

Use standard RTS polarity

-12V = Inactive

+12V = Active



Invert CTS Polarity (RSV2).

+12V = Inactive, do not send

-12V = Active, OK to send



*Standard CTS Polarity.

-12V = Inactive, do not send

+12V = Active, OK to send



Activate RTS, Do Not Wait for CTS (RSV3).

Activate RTS for transmission but, do not wait for CTS to send.

Hardware Handshaking



***Activate RTS, Wait for CTS.**
Wait for CTS after activating RTS.



Test CTS Not Present Before RTS (RSV4).
Do not activate RTS if CTS is already present.



***Do Not Test for CTS Present Before RTS.**
Activate RTS without testing if CTS is already active.



Enable DTR Support.
When enabled the scanner will stop scanning when the Data Terminal Ready (DTR) signal goes inactive.



***Disable DTR Support.**



Enable RTS Counter Toggle.
The scanner will toggle the RTS line on a good decode.



***Disable RTS Counter Toggle.**

Software Handshaking



Enable XON/XOFF Handshaking.

When enabled, the scanner will stop transmission whenever on XOFF (ASCII 13H) is received. Transmission will resume after an XON (ASCII 11H) is received.



*Disable XON/XOFF Handshaking.

The scanner will not test for XON/XOFF.



Enable ACK/NAK.

After transmitting data, wait for an ACK (06H) or a NAK (15H) response from the host. If ACK is received, complete the communications cycle and look for more bar codes. If NAK is received, retransmit the last set of bar code data and wait for ACK/NAK again.



*Disable ACK/NAK.

Do not support ACK/NAK handshaking.



Support BEL/CAN in ACK/NAK.

When BEL (07H) is received, the scanner beeps 3 times and exits the communications loop. If a CAN (18H) is received, then the scanner will exit the communications loop, silently.



*Ignore BEL/CAN in ACK/NAK.

Ignore BEL/CAN characters in communication loop.



Enable 5 Retries on ACK/NAK Time Out.

Allow up to 5 NAK retransmissions of the data before dropping out of the communications loop.



*Disable 5 Retries on ACK/NAK Time Out.

Do not limit retransmission to 5 NAK cycles.

Miscellaneous



Enable French PC Term.

When enabled, the scanner transmits PC type make/break scan codes instead of ASCII data characters. The scan codes match a WYSE French PC Term



***Disable French PC Term.**

Do not transmit in French PC Term mode.

KEYBOARD

Enable Keyboard Emulation



Load Keyboard Wedge Defaults.

Loads default settings for keyboard wedge mode.



Enable Stand-Alone Keyboard Emulation.

Use this with special stand-alone models that are not cabled for an external keyboard. Scan this bar code to enable the Stand-Alone Mode. The scanner will send keyboard “power on” information and configure hardware to simulate a constant keyboard connection.



***Enable Keyboard Wedge Emulation.**

Use this with an external keyboard. Transmit in wedge mode to allow standard PC keyboards to communicate when no bar code data is available.

Country/Scan Code Table Selects



***USA Keyboard.**

Enable USA keyboard.



Switzerland Keyboard.

Enable Swiss keyboard.



Spain Keyboard.

Enable Spanish keyboard.



Italy Keyboard.

Enable Italian keyboard.

KEYBOARD (CONTINUED)

Country/Scan Table Selects



Germany Keyboard.
Enable German Keyboard.



France Keyboard.
Enable French keyboard.



UK Keyboard.
Enable UK keyboard.



Belgium Keyboard.
Enable Belgium Keyboard.



Japan Keyboard.
Enable Japanese keyboard.



IBM 4700 Financial Keyboard.
Enable IBM 4700 Financial keyboard.

KEYBOARD (CONTINUED)

Keyboard/ System Type



***AT Keyboard.**

If using an AT computer, scan the above.
(Includes IBM PS/2 and compatible models
50, 55, 60, 80).



XT Keyboard.

If using on XT computer, scan the above.



PS/2 Keyboard.

Scan the above for PS/2 computer. (Includes
IBM PC and compatible models 30, 70,
8556).

Special Keyboard Features



Transmit Make Code Only.

Do not scan unless instructed by a Metrologic
representative.



***Transmit Make/Break Code.**

Do not scan unless instructed by a Metrologic
representative.



***Transmit FOH Break Code.**

The scanner will transmit the FOH in the
break-code sequence.



Do Not Transmit FOH Break Code.

The scanner will not transmit the FOH in the
break-code sequence.



Transmit Cleanup Bit.

Use for certain NEC Computers.

KEYBOARD (CONTINUED)

Special Keyboard Features



***Do Not Transmit Cleanup Bit.**



Enable Alt Mode.

When enabled, the scanner will duplicate this keyboard sequence: *Hold down Alt key: Type decimal number that corresponds to the appropriate character.*



***Disable Alt Mode.**

Caution: If host software application uses the right Alt key as a "Hot" key, Alt mode must be disabled.



Enable auto Detect Mode (AT/PS2).

Automatically detects caps lock status.



***Disable Auto Detect Mode (AT/PS2)**

When disabled, the Caps Lock feature is not supported.



Enable Caps Lock (XT).



***Disable Caps Lock (XT).**

When disabled, the Caps Lock feature is not supported.



Send Numbers as Keypad Data.

When enabled, all data is sent as if it has been entered on a keypad.

KEYBOARD (CONTINUED)

Special Keyboard Features



³ 1 1 6 3 0 6

***Send Numbers as Normal Data.**



³ 1 1 6 4 1 0

Enable Reserved Feature.



³ 1 1 6 4 0 0

***Disable Reserved Feature.**



³ 1 1 6 3 0 3

***Use Extended ASCII To Send Extended Key Codes.**

Use extended ASCII characters to send PC keyboard keys such as F1, F2, etc...



³ 1 1 6 3 1 3

Use Extended ASCII Characters As Extended ASCII>

Transmit extended ASCII codes via Alt Mode.



³ 1 1 6 3 0 4

***Character KB Inhibit.**



³ 1 1 6 3 1 4

Message KB Inhibit.



³ 1 1 6 3 1 2

Enable Right Alt Key Sequencing.



³ 1 1 6 3 0 2

Disable Right Alt Key Sequencing.

InterScan Code Delays



***InterScan Code Delay 800 msec.**

The time specified represents the amount of time between individual 11 bit-scan codes. This parameter may need to be adjusted for operation with certain PC keyboard BIOS.



InterScan Code Delay 7.5 msec.

This time specified represents the amount of time between individual 9 bit-scan codes. This parameter may need to be adjusted for operation with certain PC keyboard BIOS.



InterScan Code Delay 15 msec.

The time specified represents the amount of time between individual 11 bit-scan codes. This parameter may need to be adjusted for operation with certain PC keyboard BIOS.



~Variable InterScan Code Delay msec.

Refer to MultiCode Method on page 1.

Control Sets

In general, standard bar code symbologies will only encode the ASCII character set. Function keys, arrow keys and many other "extended" keys on an IBM compatible keyboard do not translate to ASCII characters. One method of "bar coding" the extended keys is to substitute the extended key codes when a specific ASCII control character is found in the bar code stream. The Control Sets are specific translations of the ASCII (HEX) set.

Control Set #1



Enable Control Set #1.



Disable Control Set #1

KEYBOARD (CONTINUED)

Control Set #1

ASCII (HEX)	ASCII Control	Extended Key
00H	Null	Numeric Keypad + (Plus)
01H	SOH	Num Lock
02H	STX	Down Arrow
03H	ETX	Numeric Keypad- (Minus)
04H	EOT	Insert
05h	ENQ	Delete
06H	ACK	System Request
07H	BEL	→ (Right Arrow)
08H	BS	← (Left Arrow)
09H	TAB	Tab
0AH	LF	Caps Lock
0BH	VT	Shift Tab
0CH	FF	Left Alt
0DH	CR	Enter
0EH	SO	Left Control
0FH	SI	Up Arrow
10H	DLE	F1
11H	DC1	F2
12H	DC2	F3
13H	DC3	F4
14H	DC4	F5
15H	NAK	F6
16H	SYN	F7
17H	ETB	F8
18H	CAN	F9
19H	EM	F10
1AH	SUB	Home
1BH	ESC	Esc
1CH	FS	Page Up
1DH	GS	Page Down
1EH	RS	Print Screen
1FH	US	End

OCIA



Enable OCIA Mode.

Select this option if communications requires OCIA (Optically Coupled Interface Adapter). This serial interface is clocked by the host.



Load OCIA Defaults.



Enable DTS/Siemens.



***Enable DTS/Nixdorf.**



Enable NCR-S.



Enable NCR-F

LIGHT PEN PARAMETERS

Lite Pen Parameters



Enable Light Pen Mode.

Select this option if the scanner will be used in place of a light pen. It provides light pen emulation of each bar code scanned.



***Bars High.**



Spaces High.



Transmit as Code 39.

All bar codes will be decoded then transmitted as Code 39 bar codes.



***Transmit as Scanned.**

All bar codes will be decoded and transmitted in that symbology.



Poll Light Pen Source.

When chosen, the scanner waits for an active source voltage before transmitting data.



***Do Not Poll Light Pen Source.**

When chosen, the scanner will not wait for an active source voltage before transmitting data.

LIGHT PEN PARAMETERS

Light Penn Parameters



Enable Light Pen Extra Toggle. When enabled, the scanner beeps and toggles the light pen data line with an extra data pulse to condition the decoder.



***Disable Light Pen Extra Toggle.**



10x Narrow Element Border.
This bar code allows the transmission of Light Pen/Wand emulation using a 10x border.



***50x Narrow Element Border.**
This bar code allows the transmission of Light Pen/Wand emulation using a 50x border.

Set Narrow Element Width



***1 ms Narrow Element Width** This option allows the transmission of Light Pen/ Wand emulation at 1ms Narrow Element width.



60 μs Narrow Element Width. This transmits at 60 μs Narrow element width.



100 μs Narrow Element Width.
This transmits at 100μs Narrow element width.

LIGHT PEN PARAMETERS

Set Narrow Element Width



500 μ s Narrow Element Width.

This transmits at 500 μ s Narrow element width.



~Variable Narrow Element Width. Sets the minimum x-dimension in 6 μ s increments. Scan this code followed by a 3 digit code byte sequence found (pages 83-90) Refer to MultiCode Method on page 1.



Enable IBM 46xx Communication.

Select this option for IBM 46xx SIOC/RS485 communications. Not all scanners support this interface. The correct interface board is required.



Load 46xx IBM Defaults.

Load default format settings for the IBM 46xx systems.

IBM 46XX CONFIGURATION

IBM Port



³ 3 1 7 2 5 0

IBM Port 17B 3687-2 In Counter.



³ 3 1 7 2 6 0

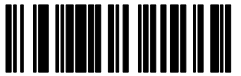
IBM Port 5B 1520 HH Laser.



³ 3 1 7 2 7 0

IBM Port 9B 4500 CCD HH BCRI.

IBM Reserved Codes



³ 3 1 7 2 0 0

IBM Reserved #1.



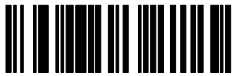
³ 3 1 7 2 1 0

IBM Reserved #2.



³ 3 1 7 2 2 0

IBM Reserved #3.



³ 3 1 7 2 3 0

IBM Reserved #4



³ 3 1 7 2 4 0

IBM Reserved #5.

CODE BYTES USAGE

NOTE:

Use Configurable Prefixes, Symbol Length and other features that use these Code Bytes for configuration, require that the scanner be in Configuration Mode. Scan the Enter/Exit Configuration Mode bar code before starting the configuration cycle. Single Code Configuration Mode does not work for these multi-code sequences.

Example #1

User configurable prefix/suffix characters (section E) can be saved into the scanner by scanning the 3 digit decimal equivalent of the ASCII character into the appropriate character location with the code byte bar code.

Add an Asterisk (*) as a Prefix

- | | | |
|----|------------------------|-----------|
| 1. | Enter/Exit | (3 beeps) |
| 2. | Configurable Prefix #1 | (1 beep) |
| 3. | Code Byte #0 | (1 beep) |
| 4. | Code Byte #4 | (2 beeps) |
| 5. | Code Byte #2 | (3 Beeps) |
| 6. | Enter/Exit | (3 Beeps) |

CODE BYTES USAGE (CONTINUED)

Code Bytes 0-5



Code Byte 0.



Code Byte 1.



Code Byte 2.



Code Byte 3.



Code Byte 4.



Code Byte 5.



Code Byte 6.



Code Byte 7.



Code Byte 8.



Code Byte 9.

CODE BYTES USAGE (CONTINUED)

Reserved Codes



~Enable Reserved Code. Contact Metrologic for information about this feature.



~Disable Reserved Code.

Code Byte/Code Type Table

Code Byte	Code Types
004	UPC-A
002	UPC-E
003	EAN-8
005	EAN-13
080	Code 39
081	Codabar
082	Interleaved 2 of 5
083	Code 128
084	Code 93
091	MSI Plessey
092	Code 11
093	Airline 2 of 5 (15 digits)
094	Matrix 2 of 5
095	Telepen
096	UK Plessey
099	TRI-OPTIC
098	Standard 2 of 5
097	Airline (13 digits)

CODE BYTES USAGE (CONTINUED)

ASCII Reference Table

HEX Value	Decimal Value /Code Byte Value	Character	Control Keyboard Eqv
00	000	NUL	@
01	001	SOH	A
02	002	STX	B
03	003	ETX	C
04	004	EOT	D
05	005	ENQ	E
06	006	ACK	F
07	007	BEL	G
08	008	BS	H
09	009	HT	I
0A	010	LF	J
0B	011	VT	K
0C	012	FF	L
0D	013	CR	M
0E	014	SO	N
0F	015	SI	O
10	016	DLE	P
11	017	DC1	Q
12	018	DC2	R
13	019	DC3	S
14	020	DC4	T
15	021	NAK	U
16	022	SYN	V
17	023	ETB	W
18	024	CAN	X
19	025	EM	Y
1A	026	SUB	Z
1B	027	ESC	[
1C	028	FS	\

CODE BYTES USAGE (CONTINUED)

ASCII Reference Table

HEX Value	Decimal Value /Code Byte Value	Character	Control Keyboard Eqv
1D	029	GS	^
1E	030	RS	_
1F	031	US	space,blank
20	032	SP	
21	033	!	
22	034	"	
23	035	#	
24	036	\$	
25	037	%	
26	038	&	
27	039	'	apostrophe
28	040	(
29	041)	
2A	042	*	
2B	043	+	
2C	044	,	comma
2D	045	-	minus
2E	046	.	period
2F	047	/	
30	048	0	number zero
31	049	1	number one
32	050	2	
33	051	3	
34	052	4	
35	053	5	
36	054	6	
37	055	7	
38	056	8	
39	057	9	

CODE BYTES USAGE (CONTINUED)

ASCII Reference Table

HEX Value	Decimal Value /Code Byte Value	Character	Control Keyboard Eqv
3A	058	:	
3B	059	;	
3C	060	<	less than
3D	061	+	
3E	062	>	greater than
3F	063	?	
40	064	@	shift P
41	065	A	
42	066	B	
43	067	C	
44	068	D	
45	069	E	
46	070	F	
47	071	G	
48	072	H	
49	073	I	letter I
4A	074	J	
4B	075	K	
4C	076	L	
4D	077	M	
4E	078	N	
4F	079	O	letter O
50	080	P	
51	081	Q	
52	082	R	
53	083	S	
54	084	T	
55	085	U	
56	086	V	
57	087	W	
58	088	X	

CODE BYTES USAGE (CONTINUED)

ASCII Reference Table

HEX Value	Decimal Value /Code Byte Value	Character	Control Keyboard Eqv
59	089	Y	
5A	090	Z	
5B	091	[shift K
5C	092	\	shift L
5D	093]	shift M
5E	094	^	à,shift N
5F	095	_	~, shift O, underscore
60	096	`	accent grave
61	097	a	
62	098	b	
63	099	c	
64	100	d	
65	101	e	
66	102	f	
67	103	g	
68	104	h	
69	105	i	
6A	106	j	
6B	107	k	
6C	108	l	
6D	109	m	
6E	110	n	
6F	111	o	
70	112	p	
71	113	q	
72	114	r	
73	115	s	
74	116	t	
75	117	u	
76	118	v	
77	119	w	
78	120	x	

CODE BYTES USAGE (CONTINUED)

ASCII Reference Table

HEX Value	Decimal Value /Code Byte Value	Character	Control Keyboard Eqv
79	121	y	
7A	122	z	
7B	123	{	
7C	124		vertical slash
7D	125	}	alt mode
7E	126	~	(alt mode)
7F	127	DEL	delete, rubout

Extended Key Code Reference Table

Key	At Scan Code	XT/P52 Scan Code	Prefix/Suffix Value Hex = Decimal
↑	75H	48H	80H = 128
↓	72H	50H	81H = 129
→	74H	4DH	82H = 130
←	6BH	4BH	83H = 131
Insert	70H	52H	84H = 132
Delete	71H	53H	85H = 133
Home	6CH	47H	86H = 134
End	69H	4FH	87H = 135
Page Up	7DH	49H	88H = 136
Page Down	7AH	51H	89H = 137
Right Alt	11H	38H	8AH = 138
Right Ctrl	14H	1DH	8BH = 139
Reserved	00H	00H	8CH = 140
Reserved	00H	00H	8DH = 141
Numeric Keypad Enter	5AH	1CH	8EH = 142
Numeric Keypad/	4AH	35H	8FH = 143
F1	05H	3BH	90H = 144
F2	06H	3CH	91H = 145
F3	04H	3DH	92H = 146
F4	0CH	3EH	93H = 147

CODE BYTES USAGE (CONTINUED)

Extended Key Code Reference Table

Key	At Scan Code	XT/P52 Scan Code	Prefix/Suffix Value Hex = Decimal
F5	03H	3FH	94H = 148
F6	0BH	40H	95H = 149
F7	83H	41H	96H = 150
F8	0AH	42H	97H = 151
F9	01H	43H	98H = 152
F10	09H	44H	99H = 153
F11	78H	57H	9AH = 154
F12	07H	58H	9BH = 155
Numeric +	79H	4EH	9CH = 156
Numeric -	7BH	4AH	9DH = 157
Numeric *	7CH	37H	9EH = 158
Caps Lock	58H	3AH	9FH = 159
Num Lock	77H	45H	A0H = 160
Left alt	11H	38H	A1H = 161
Left Ctrl	14H	1DH	A2H = 162
Left Shift	12H	2AH	A3H = 163
Right Shift	59H	36H	A4H = 164
Print Screen	Multiple		A5H = 165
Tab	ODH	OFH	A6H = 166
Shift Tab	8DH	8FH	A7H = 167
Enter	5AH	1CH	A8H = 168
ESC	76H	01H	A9H = 169
Left ALT Make	11H	36H	AAH = 170
Left ALT Break	11H	B6H	ABH = 171
Left CTRL Make	14H	1DH	ACH = 172
Left CTRL Break	14H	9DH	ADH = 173
*Left ALT + 1 character	11H	36H	AEH = 174
*Left Ctrl + 1 character	14H	1DH	AFH = 175

*Example

1st Configurable Prefix = 174

2nd Configurable Prefix = 065

Scanner will transmit <left ALT Make> "A" <Left ALT Break>

MISCELLANEOUS FEATURES

Custom Defaults

Metrologic manufactures several scanners for OEM applications. These scanners may use a different set of defaults than Metrologic factory defaults. Scanning the bar code will reset the default table to Metrologic defaults.



Enable Factory Defaults. Scan this code followed by “Recall Defaults” code to enable and load Metrologic Factory Defaults.



Recall Defaults.



Ruby Verifone Defaults. Scan this code followed by “Recall Defaults” code to enable and load Ruby Verifone Defaults.



RCH. Scan this code followed by “Recall Defaults” code to enable and load RCH Defaults.



Sanyo. Scan this code followed by “Recall Defaults” code to enable and load Sanyo Defaults.



Gilbarco. Scan this code followed by “Recall Defaults” code to enable and load Gilbarco Defaults.



ALT Defaults. Scan this code followed by “Recall Defaults” code to enable and load Alt Defaults.

MISCELLANEOUS FEATURES

Serial Program Mode

For Serial Program Mode, all commands must be framed by an STX (02 Hex) and ETX (03 Hex).

To recall defaults:

1. Transmit <STX>999999<ETX> through the Serial Port. This will put the scanner in serial program mode. Scanning will be suspended and the scanner will respond with an ACK (06 Hex).
2. Transmit <STX>999998<ETX> through the Serial Port. This is the Recall Defaults bar code in the MetroSelect guide. The scanner will respond with an ACK (06 Hex).
3. Transmit <STX>999999<ETX> through the Serial Port. This will cause the scanner to exit program mode and save the new settings. The scanner will beep 3 times and send an ACK (06 Hex).

If at anytime, the scanner cannot recognize a command, it will respond with a NAK (15 Hex). Please refer to the Installation and User's Guide of the scanner for a complete description of Serial Program Mode.